

This document provides additional assistance with wiring your Extron IP Link enabled product to your device. Different components may require a different wiring scheme than those listed below.

For complete operating instructions, refer to the user's manual for the specific Extron IP Link enabled product or the controlled device manufacturer supplied documentation.

## Device Specifications:

Device Type: Display  
 Manufacturer: Samsung  
 Firmware Version: N/A  
 Model(s): PPM42M6, PPM50M6, PPM63M6, PPM63M7F, PPM50M7HB, PPM42M7F, PPM50M7F, PPM63M7FB

## Version History:

Driver Version	Date	IP Link Compiler	IP Link Firmware	GC2 Version	Notes
10	10/11/2012	1.5.1	1.14	3.3.2	Added model PPM63M7FB and added MLC 60 Series Support.
9	05/11/09	1.3.11.1	1.14	2.5.1	Beta. Added support for PPM42M7F and PPM50M7F models. Condensed aspect ratio and added support for HDMI aspect ratio. Added Device ID selection
8	10/01/08	1.3.11.1	1.14	2.4.1	Added HDMI input command, Beta.
7	7/24/08	1.3.11.1	1.14	2.4.0	Added PPM50M7HB model, Released.
6	11/28/07	1.3.11.1	1.12	2.3.0	Added PPM63M7F model, Released
5	8/28/07	1.3.11.1	1.12	2.3.0	Released version. Tested with PPM42M6HB. Inserted delays between out-going commands and status queries.
4	7/11/07	1.3.11.1	1.12	2.2.1	Beta version. Modified status section due to lockup issues.
3	6/07/07	1.3.11.1	1.12	2.2	Custom version.
2	4/23/07	1.3.11.1	1.10	2.2	Custom unidirectional version.
1	3/29/07	1.3.11.1	1.11	2.2	Initial beta version.

## Driver Notes:

- Device ID should be set to monitors set ID.
- Status is based on the selection of the device ID.
- Device ID is set to default of 1.
- Status is not supported when broadcasting commands.
- Aspect ratio commands rely on bi-directional control.

## Control Commands & States:

<b>Aspect Ratio<sup>1</sup></b>	16:9	Wide	Zoom
	4:3	Just Scan	
<b>Audio Mute</b>	On	Off	
<b>Auto Image</b>	Execute		
<b>Device ID</b>	Broadcast	0 to 99	
<b>Executive Mode</b>	On	Off	
<b>Input</b>	DVI	PC1	PC2
	Component	S-Video	Video
	HDMI <sup>3</sup>		
<b>PIP Input<sup>2</sup></b>	Video	S-Video	
<b>PIP Position<sup>2</sup></b>	Upper Left	Upper Right	Lower Left
	Lower Right		
<b>Picture In Picture<sup>2</sup></b>	On	Off	
<b>Power</b>	On	Off	
<b>Volume</b>	0 - 100		

1. PC1, PC2, and DVI Inputs only support 16:9 and 4:3 aspect ratios.

The HDMI input only supports the Just Scan command.

2. PIP control is only available for certain inputs, please see PIP Compatibility table on Page 3.

3. HDMI pertains to M7 models.

**Status Available:**

<b>Aspect Ratio</b>	16:9 4:3	Wide	Zoom
<b>Audio Mute</b>	On	Off	
<b>Connection Status</b>	Connected	Disconnected	Status Unavailable
<b>Executive Mode</b>	On	Off	
<b>Input</b>	DVI Component HDMI	PC1 S-Video	PC2 Video
<b>PIP Input*</b>	Video	S-Video	
<b>PIP Position*</b>	Upper Left Lower Right	Upper Right	Lower Left
<b>Picture In Picture*</b>	On	Off	
<b>Power</b>	On	Off	
<b>Volume</b>	0 to 100 in steps of 1		

**\*PIP Compatibility table:**

Changing the PIP source may not be available depending on the main source.  
See table below.

Main Sub	AV	S-Video	Component	PC1	PC2	DVI
AV	X	X	X	○	○	○
S-Video	X	X	X	X	X	○
Component	X	X	X	X	X	X
PC1	X	X	X	X	X	X
PC2	X	X	X	X	X	X
DVI	X	X	X	X	X	X

O = Available  
X = Not Available

# IP Link® Device Interface Communication Sheet

## ***MLC60 Series Supported Commands:***

<b>Aspect Ratio</b>	16:9 Zoom	4:3 Just Scan	Wide
<b>Audio Mute</b>	On	Off	
<b>Auto Image</b>	Execute		
<b>Device ID</b>	Broadcast	0 to 99	
<b>Executive Mode</b>	On	Off	
<b>Input</b>	DVI Component HDMI	PC1 S-Video	PC2 Video
<b>Picture In Picture</b>	On	Off	
<b>PIP Input</b>	Video	S-Video	
<b>PIP Position</b>	Upper Left Lower Right	Upper Right	Lower Left
<b>Power Control</b>	On	Off	
<b>Volume (Discrete)</b>	0 to 100 in steps of 1		

\*The default Device ID is set to 1

## ***Cable and Adapter Requirements:***

M/F RS-232 null modem serial cable

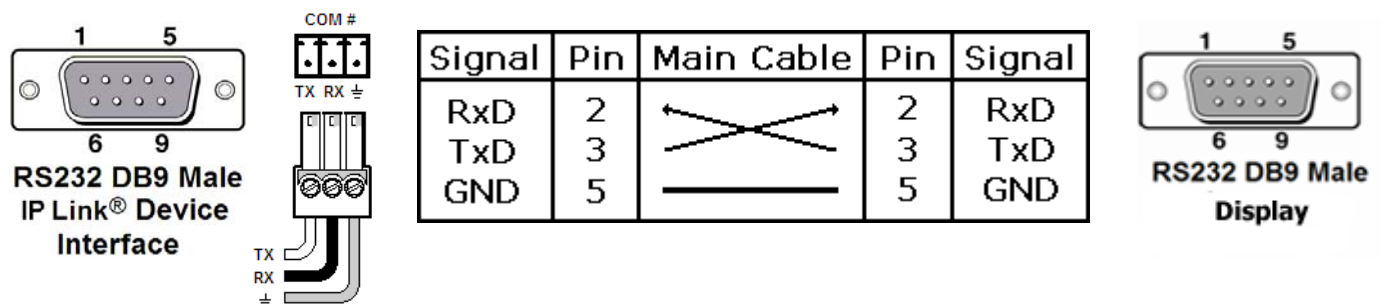
## ***Notes for the Device:***

## ***Serial communication:***

**Port Type:** RS232  
**Baud Rate:** 9600  
**Data Bits:** 8

**Parity:** None  
**Stop Bits:** 1  
**Flow Control:** None

## ***Pin Assignments Diagram:***



Note: Captive screw connector may also be used as a serial connection.

## ***General Notes:***